

July 10, 2018

EX PARTE PRESENTATION

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Ex Parte* Presentation
IB Docket No. 16-408

Dear Ms. Dortch:

Karousel LLC (“Karousel”)¹ responds to the recent *ex parte* letters filed by Telesat Canada (“Telesat”) and WorldVu Satellites Limited (“OneWeb”), arguing that the Commission’s six-percent $\Delta T/T$ trigger for coordination cannot be calculated in real time, and accordingly, application of the FCC’s default sharing rule is unworkable and should be abandoned.² Contrary to the assertions of Telesat and OneWeb, however, satellite operators do not rely principally on real-time data to effectuate coordination.³ Rather, operators commonly model increases in system noise temperature based on standard and/or negotiated input parameters and techniques and base coordination solutions on those models.⁴

¹ Karousel is an innovative, U.S.-based company that plans to offer a “celestial video jukebox” to consumers for whom broadband over video is inaccessible or unaffordable. Karousel has filed an NGSO constellation application that will provide a first-of-its-kind satellite-based video and data distribution platform using up to four operational satellites operating in each of the three global regions in highly inclined, elliptical, non-geostationary orbits. Karousel plans to offer consumers and programmers a new avenue to consume and share video and data on demand, particularly in rural America. *See* Application for Authority to Launch and Operate a Non-Geostationary Earth Orbit Satellite System in the Fixed Satellite Service, IBFS File No. SAT-LOA-20161115-00113 (filed Nov. 15, 2016).

² *See, e.g.*, Letter from Henry Goldberg, Attorney for Telesat, and Brian Weimer, Counsel for OneWeb, to Marlene H. Dortch, Secretary, FCC, IB Docket No. 16-408 (filed June 20, 2018) (“Telesat/OneWeb Letter”). Letter from Brian Weimer, Counsel for OneWeb, to Marlene H. Dortch, Secretary, FCC, IB Docket No. 16-408 (filed June 13, 2018).

³ *See also* Letter from John P. Janka, Counsel to ViaSat, to Marlene H. Dortch, Secretary, FCC, IB Docket No. 16-408 (filed May 14, 2018) (providing a technical analysis rebutting the arguments of Telesat and OneWeb).

⁴ *See, e.g., Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, Order on Reconsideration and Second Report and Order, 31 FCC Rcd 5011, 5044-45 (2016) (authorizing opportunistic use of unused spectrum determined by contour-based engineering models based on assumptions and common propagation models that are “as simple and easily implementable as possible to promote rapid deployment in the band.”).

Indeed, interpreting the FCC's coordination trigger in the real-time manner proposed by Telesat and OneWeb would prioritize the "perfect" over the "good." In so doing, it would establish a precedent that would make spectrum sharing much more difficult and impractical.⁵ Such a decision would be contrary to Commission efforts to encourage spectrum sharing, which has become increasingly more relevant to address the growing demand for spectrum.⁶ Moreover, as Karousel has stated, the U.S. NGSO Sharing Rule encourages good-faith coordination and avoids the anticompetitive pitfalls of the International Telecommunications Union's ("ITU") Rule, as discussed below.⁷

NGSO operators must share the band equally when: (i) one system increases the noise temperature of another system by more than 6 percent; and (ii) good-faith coordination proves unsuccessful (the "U.S. NGSO Sharing Rule").⁸ This rule is not "band-splitting," as OneWeb insinuates. The U.S. NGSO Sharing Rule requires good-faith coordination as the default. Only where good-faith coordination proves unsuccessful does equitable sharing become an option. To the extent equitable sharing is a harsh remedy, it serves the purpose of discouraging parties from prematurely abandoning their coordination efforts. OneWeb's narrow attack on the purported harms associated with "band-splitting" misses the broader context of the U.S. NGSO Sharing Rule, which features equitable sharing as only one part of a holistic mechanism to encourage the deployment of efficient systems with a high likelihood of real-world deployment. The U.S. NGSO Sharing Rule promotes system and spectrum efficiency, encourages timely deployment, and guards against the regulatory gamesmanship well documented in the ITU system, which awards the entire band to the party that happens to submit its filing first (the "ITU Rule").

Replacing the current U.S. NGSO Sharing Rule⁹ with the first-in-time rule of the International Telecommunication Union would promote speculation and warehousing; encourage inefficient system designs; reward anticompetitive behavior; and discourage good-faith coordination. By

⁵ Cf. *Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, Report and Order and Second Further Notice of Proposed Rulemaking, 30 FCC Rcd 3959, 4052 (2015) (establishing sharing framework in the 3.5 GHz band in which the spectrum access system, which has a role "akin to frequency coordination," sets the permissible power levels and authorizes available frequencies in locations but does not "micromanage the moment-to-moment operations" of 3.5 GHz devices).

⁶ See Remarks of David J. Redl, Assistant Secretary of Commerce for Communications and Information, at CES 2018 (Jan. 10, 2018), *available at* <https://bit.ly/2Kxdu2h> ("NTIA continues to support the FCC's Spectrum Frontiers proceeding by collaborating on an approach for sharing between federal and non-federal users in the 37 GHz band."); see also Monica Allevan, *Trump White House OSTP, Others Agree Sharing Will Be Key in Future Spectrum Policy*, FIERCEWIRELESS (June 13, 2018), <https://bit.ly/2IHpcWA>.

⁷ Letter from Don Doering, Administrative Partner for Columbia Capital, to Marlene H. Dortch, Secretary, FCC, IB Docket No. 16-408 (filed Mar. 19, 2018).

⁸ 47 C.F.R. § 25.261(c).

⁹ *Id.*

giving preferential access to multiple gigahertz of frequencies to the applicant that happened to submit its filing first with the ITU, the ITU Rule would require every other NGSO applicant to “design around” the technical specifications of a single proposed system whose operations may never come to fruition. The first-in-time applicant would have no reason to design an NGSO constellation that makes optimal use of space station and spectrum resources based on the applicant’s business model, as it does today under the U.S. NGSO Sharing Rule.

To the contrary, adopting the first-in-time ITU Rule would encourage applicants to design systems that inefficiently use spectrum because doing so would better allow the first-in-time applicant to extract monopoly rents from later applicants. The risk of encouraging rent-seeking behavior increases where, as here, the first-in-time applicants have proposed “megaconstellations,” which could effectively occupy much of the available spectrum and orbital resources over the United States. For these reasons, the Commission has long recognized that relying on the ITU filing date as the default sharing mechanism would impair “licens[ing] satellites in a manner that promotes open entry, competition, maximum flexibility, technical innovation, and seamless networks”¹⁰ and “unduly chill investment in competing systems.”¹¹

Finally, the Commission should reject Telesat and OneWeb’s attacks on the U.S. NGSO Sharing Rule because they are time-barred. The Commission already considered and rejected all of these arguments.¹² The U.S. NGSO Sharing Rule has been in place since 2002; therefore, nothing in the *NGSO R&O* is available for the Commission to “reconsider.”¹³ The Commission did not change the U.S. NGSO Sharing Rule in the *NGSO R&O*, but rather extended the United States’ longstanding policy to additional spectrum bands. Supplanting the U.S. NGSO Sharing Rule with the ITU Rule would undermine the Commission’s processing round framework, which has long sought to avoid a situation that would permit “the first qualified applicant [to] request authority to operate in so much of the orbit-spectrum resource that additional market entry would be precluded.”¹⁴ Granting the OneWeb Petition would also reverse the United States’ established practice against applying the coordination rules of the International Telecommunication Union¹⁵ because doing so would force the United States to make difficult

¹⁰ *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Service*, Third Report and Order, 12 FCC Rcd 22310, 22316 (1997).

¹¹ *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, Report & Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 7809, 7825 (2017) (“*NGSO R&O*”).

¹² *See id.*

¹³ *See The Establishment of Policies and Service Rules for the Non-Geostationary Satellite Orbit, Fixed Satellite Service in the Ku-band*, Report and Order, 17 FCC Rcd 7841, ¶ 27 (2002).

¹⁴ *Amendment of the Commission's Space Station Licensing Rules and Policies*, First Report and Order, 18 FCC Rcd 10760, 10773 (2003).

¹⁵ *NGSO R&O* ¶ 45.

judgment calls about whether applicants have perfected their rights under the ITU's complex and, at times, arcane procedures.¹⁶ No changed circumstances justify reconsideration of these past decisions.

Respectfully submitted,

/s/ Don Doering

Don Doering
Karousel LLC
Columbia Capital
204 South Union Street
Alexandria, VA 22314
703-519-2000

¹⁶ See *EchoStar Satellite Operating Company*, 28 FCC Rcd 10412, 10416-17 (2013) (determining that the International Bureau “appropriately declined to make determinations concerning the ‘perfecting’ of ITU filings of other Administrations, observing correctly that such determinations are for the ITU”); see also *Opposition of ViaSat, Inc. to Petition for Reconsideration of WorldVu Satellites Limited*, IB Docket No. 16-408 (filed Feb. 20, 2018).